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ABSTRACT

The booklet is designed to aid school administrators, vocational directors, and teacher coordinators to better determine equipment needs, classrcom layouts, and room locations for distributive education (DE) students. The results of two surveys provided the data on which the suggestions are based. The first obtained responses from the DE supervisors in 47 States to a series of questions relating to their perceptions of space and equipment needs for a DE classroom. The second, covering similar areas, elicited a 95 percent response from DE coordinators in Nebraska. Although individual classroom and program needs vary, some items were felt to be essential by most supervisors and coordinators, and should be considered when planning new facilities. Emphasis was placed on adequate space, including storage space, laboratory space, display areas, and equipment (display equipment, sign machines, aduiovisual, student tables, and cash register). The DE classroom does not need a quiet location, and may actually benefit from being situated in a high traffic area. The cost is comparable to that of a typical classroom, particularly if the possibility of rental of equipment from local stores in return for free advertising is considered. Many DE suppliers will assist with classroom layouts. (SA)

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The Physical Needs of a

DISTRIBUTIVE EDUCATION CLASSROOM

" Equipment and Space "

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This booklet is designed to aid school administrators, vocational directors and teacher coordinators to better determine equipment needs, classroom layouts and room locations for Distributive Education students. It is not meant to contain specifics, but to give an overview of many varied programs. As with any given vocational program in any given community the appropriate equipment and instruction can be determined only after evaluating the needs of students as well as the needs of the community or area.

If, after you review this booklet, you have unanswered questions concerning equipment or layouts for your D. E. classes please contact Larry Loomis, Administrator of Distributive Education, Nebraska State Department of Education, for help in determining local needs or assistance in obtaining free blueprint layouts, designed specifically for your local school.

The curriculum and projects of a Distributive Education classroom may be likened to a small scale business firm. For this very reason, school administrators are often taken aback by the classroom layout and equipment needs necessary to operate a D. E. program. School administrators would prefer to liken D. E. to the English, History or Chemistry classes with which they are familiar when in essence the Distributive Education program is a business within a business (a business training situation within the school business).

D. E. is no more expensive than the typical classroom program of old. However, to be effective, its structure, design and layout require some serious thought prior to its effective implementation.

Realizing the ever present expansion and rebuilding of schools, this investigator intends to itemize the exact equipment needs for the ideal D. E. classrooms whereby administrators and architects alike may at least formulate ideas before drawing blueprints.

NOTE: This investigator does not wish to suggest the idea that D. E. could not be taught in the typical classroom situation, the open classroom concept or a trailerhouse in back of the school. As most any reader would argue a class is only as good as the determination of the instructor and the will to learn on the part of students. However, a model, rather than a haphazard plan and plant, from which someday the program may improve would appear to have considerable value.

The intent of this study is to draw together meaningful data that will be useful to both superintendents and boards of education in developing new D. E. programs. Also, the study should be of value to persons who are restructuring existing programs and or building new plants or additions to school plants that would accomodate D. E. programs.

The study will attempt to offer suggestions for the designing, revamping, or restructuring of the facilities for any Distributive Education program within Nebraska.

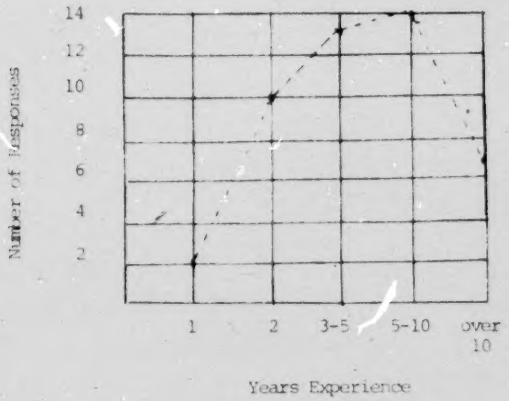
In addition to the documentation of research available within this field and personal interviews with architects familiar with the design and blue printing of modern school facilities, the heart of the research was conducted by using the survey method. Those called upon for survey input were the teacher-coordinators of Nebraska's thirty-six present D. E. programs, at least one state supervisor of D. E. from each of the fifty states and at least one teacher educator involved in Distributive Education methods instruction from each of the thirteen states in the Central Region of DECA which includes Nebraska.

The value of this study can only be determined by the number of school systems which utilize the information in designing or redesigning Distributive Education programs within Nebraska. It is hoped that this research will serve as a guide to superintendents, boards of education, city supervisors and teacher coordinators in planning their facility needs.

D. E. STATE SUPERVISOR TOLERANCE

It is predicted that the first portion of this study is highly statistically reliable in that 47 of the 49 state supervisors of D. E. responded to the questionnaire. The fiftieth state supervisor was not polled as he conducted the survey. This 95% returns will show average for such responses and will serve as justification to the initial base data.

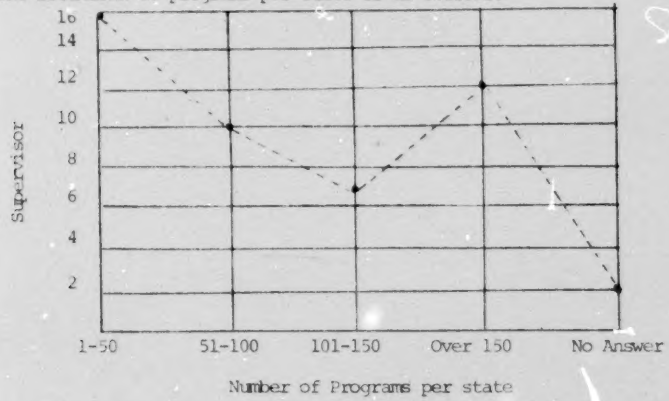
Portions of the survey were designed to give relevance to the questionnaire and such questions will now be reported. Years of involvement as a state supervisor appeared first on the collection:



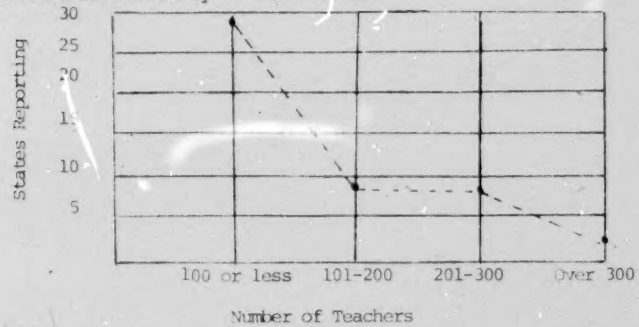
As is apparent the number of years of experience indicates the majority of state D. E. supervisors have had sufficient time to become familiar with their programs as well as the needs of teachers and students. Thirty-four supervisors or 69% of these program overseers have had three or more years of practical experience.

In addition these 47 supervisors have also had a combined effort of 231 years of classroom experience or if you will "on-the-job" training.

Beyond this, these same 47 Distributive Education leaders supervise over 5,201 high school programs which leaves each with an average of 115.6 secondary curriculums to both consult and advise. The breakdown of programs per state is as follows:

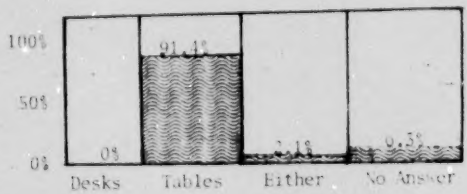


These programs employ 5,694 teacher coordinators or an average of 121.2 per supervisor. Twenty nine of these states report 100 or fewer Distributive Education teachers at the secondary level and the overall breakdown may be viewed below:



In light of the previous graph it is relatively apparent that state supervisors in general have both the practical experience and involvement necessary to pass judgement on the major needs of a secondary general merchandise program.

Our next step, based on the responses of the above designated sector of D. E. professionals is to design a classroom layout based on the need accessment of this group. One's first mental picture of a school classroom per se is perhaps typically four walls, a teacher desk and rows of student desks. When asked "Would you recommend desks or tables for secondary student classroom activities" (in a D. E. program) the response was:



It thus appears that as a result of the activities involved (i.e. advertising layouts, store layouts, displays, advertising copy, marketing research, sales demonstrations, etc.) tables which are envisioned as flatter and larger than desks are far more feasible for the operation of a general merchandise program.

Since the D. E. classroom can readily be described in the majority of cases as a scaled down store, storage space becomes a factor of concern. Where does one place equipment for protection when it is not in use? Four areas were delineated in the survey and the reponse factor is itemized below. Since the objective of

the data collection was designed to provide input into the ideal classroom setting only the positive or yes response will be reacted to. It follows that the no responses would reflect the opposing view of any positive reaction.

The recommendations for the four storage areas were:

	Yes	Yes Percent	No	No Answer	Priority Ranking
Cupboards	30	65.8%	10	7	3
Wallshelves	24	51%	15	8	4
Closets	36	76.5%	6	5	1
Additional Room(s)	33	70.2%	8	6	2

State Supervisors thus assert that closets and/or additional room(s) are viewed as the number one and two storage spaces respectively. Cupboards, smaller in size when meeting the needs of D. E. equipment, rank third and wall shelves appear to have no major priorities either for or against.

One might now enjoy at least a mental picture of a Distributive Education classroom without the final touches. What should be included in terms of facilities and equipment beyond this point was gathered by using two open ended questions plus a series of check list factors. (For a more complete explanation of this technique refer to the "D.E. State Supervisors" survey in the appendix.)

The first open ended statement asks simply for a list of the five items of equipment each state most often reimburses on.

Some forty one (41) items were listed. The reader will note when reviewing these items that many could perhaps be combined under one general title. For example, display cases, display units,

display equipment, D. E. merchandiser, gondolas, and island units received 15, 8, 10, 1, 1, and 1 votes respectively. One might logically record these as 36 responses reimbursing on display cases and shelving. However, some of the categories may perhaps be interpreted differently by different individuals. Therefore all forty one items are listed below just as they were submitted. The reader, as was alluded to earlier, may wish to combine these items into larger classifications such as display counters. One will also note that a few of these items are rather all encompassing. For example, lab equipment which received two votes might include display, advertising, check out counters, instructional materials, etc. For the sake of simplicity the items listed have been placed in five very broad, general categories:

Five items most often reimbursed on:

Display

Sign Machine	15
D. E. Merchandiser	1
Mannequins	14
Display Accessories	4
Display Cases	15
Tri-Mirror	1
Display Units	8
Display Items	2
Display Equipment	10
Gondolas	1
Island Units	1
Window Display	1
Total	73

Coordinator Needs

Telephone	1
Travel	1
Office	1
Total	3

Classroom Equipment

Overheads	9
Cash Register	23
Copy Machine	2
Check Out Counter	16
Tables/Chairs	8
A.V. Equipment	11
Simulated Store Equip.	3
Advertising Equip.	1
Tape Recorder	3
Filmstrip Projector	2
Slide Projector	2
File Cabinets	4
Sales Counter	6
Video Tape Units	2
Lab Equipment	2
Wall Fixtures	1
School Store	1
Duplicating Equip.	1
Furniture	1
Total	100

Resources

Reference Materials	2
Special Inst. Aids	1
Instructional Materials	1
DECA Materials	1
Total	5

Incidentals

Shopping Cart	1
Shelves	2
Expendable Supplies	1
Total	4

It thus follows from the above question that one would seek to find which items a state supervisor would recommend a school purchase when establishing a new D. E. program. Oddly enough the items are not identical to those most often reimbursed on. One may wish to cross reference these two questions. Again the same five general categories will be used. Those items most recommended for purchase were as follows:

Display

Display Counter	5
Window Display	8
Mannequins	14
Tri-Mirror	2
Display Equipment	17
Sign Press	12
Sign Making Equipment	6
Display Units	10
Display Cases	12
Gondolas	2
Island Units	1
Display Fixtures	1
Shadow Box	1
Total	91

Coordinator Needs

Telephone	7
Travel	1
Office	1
Total	9

Classroom Equipment

Tape Recorder	1
Cash Register	23
Filmstrip Projector	1
Check Out Counter	4
Video Tape Equipment	4
A. V. Equipment	7
Tables/Chairs	13
Store Fixtures	3
Storage Cabinets	1
Overhead Projector	8
Adding Machine	2
File Cabinets	8
Typewriter	2
School Store Equipment	1
Advertising Equipment	3
Sales Counter	5
Book Cases	1
Magazine Rack	1
Copy Machine	1
Furniture	1
Total	90

Incidentals

Shelves	2
Expendable Supplies	1
Shopping Cart	1
Total	4

Resources

Reference Materials	2
Library Resources	1
Reference Books	1
Total	4

As often happens when given an open ended question the only difference between one question and another is verbage. Perhaps this is what is identified above, perhaps not. However, in an effort to unscramble the needs a check list sheet was added to the survey as a potential point of clarification. The following questions if linked to the above open ended answers may shed light on equipment and facility needs.

Do you feel the following items are needed in a D. E. program?

	Percents		
	Yes	No	No Answer
Sink	74.5	19.1	6.4
Window Display	91.5	4.3	4.3
Interior Display Counter/Shelves	91.5	4.3	4.3
Cash Register	89.4	6.4	4.3
Tape Recorders	89.4	6.4	4.3
Telephone	87.2	6.4	6.4
Video Tape Equipment	72.3	17.0	10.6
File Cabinets	95.8	2.1	2.1
Overhead Projectors	87.2	6.4	6.4
Screens	87.2	6.4	6.4
Mannequins	83.0	8.5	8.5
Sign Machines	80.9	12.8	6.4
Student Desks/Tables	91.5		8.5
School Store Equipment	78.7	12.8	8.5

Does your state reimburse on the following items for a D. E. program?

	Percents		
	Yes	No	No Answer
Sink	29.8	55.3	14.9
Window Display	80.9	10.6	8.5
Interior Display Counter/Shelves	85.1	6.4	8.5
Cash Register	72.3	14.9	12.8
Telephone	38.3	46.8	12.8
Tape Recorders	72.3	17.0	10.6
Video Tape Equipment	59.6	27.7	12.8
File Cabinets	70.2	19.1	10.6
Overhead Projectors	74.5	14.9	10.6
Screens	63.8	21.3	14.9
Mannequins	83.0	8.5	8.5
Sign Machines	80.9	10.6	8.5
Student Desks/Tables	55.3	29.8	14.9
School Store Equipment	68.1	17.0	14.9

It is interesting to note that of the forty seven states which responded only one answered that they do not reimburse. Two others did not answer the reimbursement question and perhaps they too do not reimburse. Still two others reimburse only through Part G funding. Those states which have considered doing away with reimbursement on equipment may now wish to consider this with some hesitation.

One additional open ended question was asked in an effort to tie the "ideal classroom" into the total school setting. Once again with a question of this nature one might expect several variations often of the same answer. Simplification of the tabulation of this question was accomplished by determining general classifications into which groupings could be tallied. One will also note that there are many more than 47 responses although 47 is the base number from which this portion of the survey was taken. The additional responses result from the fact that many administrators submitted multiple answers to the question. The following responses are listed in the order of priorities as they were submitted. The classifications are those of the poles and the numbers to the right are the tallies recorded for each category.

Question: Where do you recommend the D. E. classroom be located in a school?

Priorities	Classifications	Votes
1	Main Thoroughfare	27
2	On First Floor	10
3	Near an Entrance	8
3	Near Main Entrance	8
4	Near Administrative Offices	6
5	Near Business Education Dept.	5
5	With Display Window	5
6	Integral Part of Plant	3
6	No Answer	3
7	Near Cafeteria	2

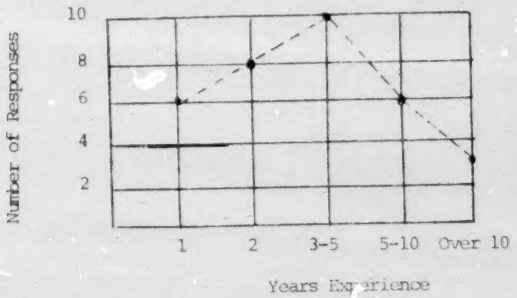
7	Near School Store	2
7	Near Student Lounge	2
7	In The Community	2
8	Near Gym	1
8	Depends on School Policy	1
8	Away From Traditional Surrounding	1
8	Away From Administration	1
8	Southeast Corner	1

Although those are answers varying frum both ends of the spectrum the dominant communication among the states is that the D. E. classroom not be secluded. Apparently freedom from noise and distractions is not a prerequisite for operating a Distributive Education program. Teachers of D. E. have often professed that the class is the show window of the program and perhaps this rationale supplants the philosophy of having the D. E. classroom in the mainstream of heavy traffic.

NEBRASKA COORDINATOR ANALYSIS

The response from Nebraska Distributive Education Coordinators was less complete than was expected. In light of the 29% turnover during and shortly following the period when the survey was conducted the 75% return should provide noteworthy information.

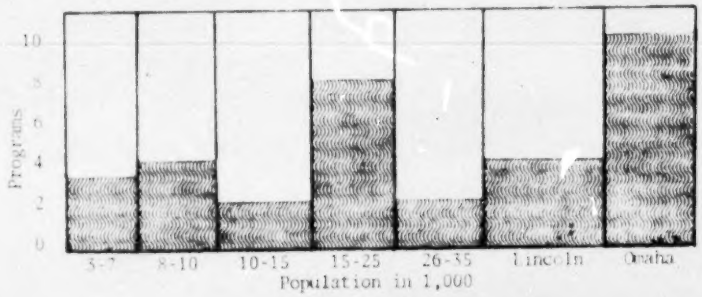
It has often been said that D. E. teachers are typically not life time classroom teachers. Their business background and required work experience for vocational approval is cause for high mobility into the business world and higher salaries. Of those responding the following graph indicates the teaching experience obtained by Nebraska teachers.



The experience indicated would appear to be of sufficient length to offer critical suggestions as to what equipment is needed in a D. E. program.

D. E. programs in Nebraska are carried on in towns from the size of Cozad and Fairbury to the Metro areas of Lincoln and Omaha.

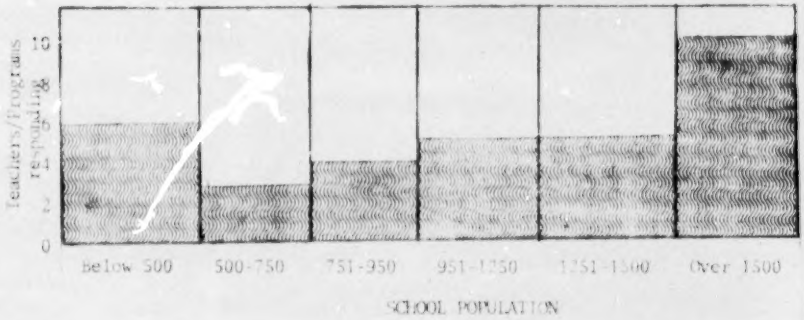
Hopefully, this broad range will provide some common factors necessary to the Distributive Education classroom. The community populations of Nebraska programs are depicted below.



Also included under Omaha on the above graph are Millard and Westside.

Of those responding some 21.2% are consolidated school districts. The remainder were schools from original individual districts save one which did not answer.

School administrators have often asked whether or not their school and town are large enough to offer on-the-job training programs. The following graph will perhaps assist in answering that question.



Although D. E. has typically been offered in larger communities it is apparent that smaller towns have had success with the program.

Every community has retail and/or wholesale business and every business needs employees.

Those returning the questionnaire stated that 32 of the 33 programs offer only two years of course work in D. E. and this is offered at the junior and senior year levels. One school also offers a sophomore year curriculum. As to what kind of enrollment numbers constitute a D. E. class load the following should prove valuable.

# of Students	Number of schools responding to the given class loads: Junior Year	Senior Year
Below 30	4	18
30-60	13	10
61-90	7	2
Over 90	9	3

Thus four programs have junior year classes with fewer than 30 students, 18 have senior year classes with fewer than 30 students and so on.

A factor that was not terribly relevant to the study, but one that provides much interest was the average number of minutes each class meets during the day. The following chart provides such information:

Minutes/Class/Day	Number of classes meeting for designated time period: Junior Year	Senior Year
40	11	11
45	4	4
50	3	3
55	12	12
60	2	2
Over 60	1	1

The attitude portion of the data indicates that 82% of the principals and 79% of the business community were strong supporters of the program. The remaining 18% and 21% respectively expressed no strong feelings toward the program with the exception that no one in either category felt a feeling of dissatisfaction. Superintendent and overall faculty responses were comparable with the exception that one program reported both groups airing a feeling of dissatisfaction.

A reliability factor in the survey was the length of existence of the program. Eight were new programs having operated for from one to three years. Ten others were four to seven year old programs, three from seven to ten years and twelve over ten years.

Twenty seven of the teachers responding were fully vocationally qualified according to the Nebraska State Plan for Vocational Education and [illegible] were on provisional approval having indicated their intent to become qualified.

The real heart of this portion of the survey dealt with the questions "what equipment do your students use most" and "what equipment would you as an instructor most like to have."

Listed below is the response for students. Display equipment, sign press equipment, cash registers, tape recorders and video tape tend to dominate the equipment scene for students.

Students Use Most	
Cash Register	17
Display cases/window/counter	25
Record Player	1
Desks	3
Adding Machines	7
Overheads	6
Files	2
Sink	2
Tape Recorder	15
Bulletin Board	2
Filmstrip Projector	4
Chalkboard	1
Interior Display Equipment	8
Video Equipment	8
Typewriters	1
Sign Press/Line-O-Scribe	17
Store Machines	1
Lab Materials	1
Resource Materials	3

Equipment that instructors would most like to have runs the gamut of D. E. related items. It is apparent that each coordinator, program and community have needs only they can determine. Only two items had a response of 25% or greater, those being a video tape machine and a telephone. The total list and need response is presented below:

Equipment Most Like To Have	Need Response
Checkout Counter	1
Cassette Tape Recorder	4
Printing Equipment	1
Display Fixtures	6
Telephone	8
Video Tape	12
Storage Cabinets	4
Tables	1
Calculator	3
Sign Machine	4

Display Cases/Counters	7
Camera	3
Display Equipment	6
Ad. Layout Board	4
Lab Space	3
Shades	1
Mannequins	1
Adding Machines	2
Typewriters	4
Cash Register	6
Desks	1
School Store	3
Office Space	3
Window Display Units	3
Bigger Classroom	9
Business Simulation Area	1
Sink	1
Individual Study Center	2
Textbooks	1
T.V.	1

The final question in major equipment needs was a check list response used to determine what items of equipment had been provided for the classroom and which items were needed in a Distributive Education facility.

	Have these items been provided?			Do you feel a need for these items?		
Check List	Yes	No	No Answer	Yes	No	No Answer
Sink	45.5	54.5	-	69.7	18.2	12.1
Window Display	72.7	27.3	-	90.9	-	9.1
Interior-Display Counters/Shelves	84.8	15.2	-	84.8	6.1	9.1
Cash Register	60.6	39.4	-	66.7	24.2	9.1
Telephone	42.4	57.6	-	93.9	3.0	3.0
Office Space	57.6	42.4	-	93.9	3.0	3.0
Tape Recorder	84.8	15.2	-	87.9	3.0	9.1
Video Tape Eq.	72.7	24.2	3.0	81.8	3.0	15.2
Teacher's Desk in Classroom	75.8	24.2	-	72.7	15.2	12.1
File Cabinets	96.9	3.0	-	87.9	-	12.1
Overhead Projector	100.0	-	-	84.8	3.0	12.1
Screen	96.9	3.0	-	84.8	3.0	12.1
Chalkboard	96.9	3.0	-	81.8	6.1	12.1
Darkening Shades (Windows)	54.5	45.5	-	60.6	30.3	9.1
Laboratory Space	36.4	63.6		87.9	3.0	9.1

In terms of classroom space available 19 of the 33 indicated they could utilize larger facilities. Storage space of the most part was adequate. When asked if the coordinators would prefer more cupboards, wall shelves, closets, or additional room, the later, additional room received the highest response of 45.4%.

APPLICABLE CONCLUSIONS OF STATE SUPERVISORS

State Supervisors of Distributive Education view tables as opposed to desks as the most usable classroom furniture.

State Supervisors view closets, additional rooms, and cupboards in that order as being the most practical additional storage space areas.

There is no one item according to state supervisors that appears to be an absolute must in operating a secondary general merchandise D. E. program. As one might expect, audio-visual equipment, check-out counters, cash registers and display equipment seem to be rather strong points of concern, and are the items most often reimbursed on.

These same items are the pieces of equipment State Supervisors would recommend new programs purchase initially.

When the above equipment needs were compared with a check sheet list included in the survey the items needed for a program were respectively; file cabinets, display pieces, student tables, cash registers and audio-visual equipment. There is thus a strong correlation of these items.

Those equipment needs which states most often reimbursed on according to the check sheet were display equipment, audio-visual equipment, cash registers and school store items.

The last major point of contention is that state supervisors recommend the Distributive Education classroom be located in an area of heavy student movement.

APPLICABLE CONCLUSIONS OF TEACHER COORDINATORS

Nebraska students heavily utilize display and sign press equipment, cash registers and audio-visual equipment.

Nebraska teachers express a need for a telephone and office space, display facilities and equipment, laboratory space, file cabinets and audio-visual equipment.

One notable exception from all previous data is that Nebraska teachers rank the need for a cash register as second lowest on the check sheet provided. (Since these are typically utilized for only a small period of time perhaps rental of cash registers is the best answer. This provides an up-to-date machine at a nominal cost.) (NOTE: Equipment rental is reimbursable in Nebraska)

Lack of physical space is noted in 58% of the programs. There is no drastic need variance between small and large communities. The only noticeable difference is in terms of classroom space needed for the number of students.

NOTE: Teacher educator survey results are not included in this analysis. Only a small number were polled and an even smaller number of the surveys were returned. Hopefully the input of the 47 state supervisors and Nebraska coordinators will provide sufficient data.

CONCLUSIONS

The following items are noteworthy throughout the survey and deserve considerable attention in determining new and expanding

facilities for a Distributive Education program. The author of this study will try to expand on a few of these for the purpose of explanation.

1. Physical Space — Adequate space should be provided for the utilization of tables as opposed to desks. Plenty of storage space should be available and the inclusion of at least one additional room should be a consideration. (Attention is called to the need for storage, office facilities with telephone and laboratory space.)

2. Laboratory Space - May be included in terms of a larger classroom or as an additional room.

3. Equipment — Needs vary from community to community and teacher to teacher. The dominant requests were for:
   - Display Equipment
   - Sign Machines
   - Audio-Visual (May obtain from the media center within the school. No special needs were voiced.)
   - Student Tables
   - Cash Register (May be rented rather than purchased.)

Location — High student traffic areas are not detriments to a D. E. classroom and are in fact assets.

Although many classes appreciate the quiet end of the hall Distributive Education does not require such.

4. Display — Consideration should be given to laboratory space, interior display shelving and counters, a display window area, display props and equipment, and a sign machine.

Based on the above the cost of a D. E. facility is comparable to a typical classroom. Whereas the art lab requires paint, the chemistry laboratory test tubes, the journalism class cameras, the D. E. class requires store facilities.

Many of the store facilities such as mannequins, counters, etc. are available from local stores either as gifts or on loan. Cash registers may be rented on short term leases. Materials for display are available from stores on a reciprocal basis for free advertising. Audio-visual equipment is a basic unit of any modern day school. Tables replace the standard student desk.

NOTE: A Distributive Education laboratory is used for sign equipment, painting, building displays and simulating other business operations, such as gift wrapping, shoplifting prevention, check out procedures for customers, etc.

A coordinators office with a telephone similar to a guidance counselor's office is ideal for individual student consultations concerning job placement, job evaluation and job problems, for setting up employer conferences, for vocational guidance talks with students and many other individual and small group activities.

CLASSROOM DESIGNS

The perfect layout was perhaps the "Impossible Dream." Adequate space for student tables, a lab, storage and a teacher coordinators office are the basic needs.

Equipment varied from program to program. Consequently, it is not feasible to block out space for a 32 inch sign machine, an electric cash register, a check out counter, a video tape unit and so on when each program requirement varied.

This author is quick to point out that many D. E. suppliers will provide classroom layouts free of charge. They have several standard classroom illustrations available in their catalogues and will provide layouts for individual schools free of charge if schools will forward the anticipated (or present) room size along with a list of the equipment and facilities they wish to include.

Although it was predicted that one or a few ideal blueprints could be drawn it was proven that building a D. E. classroom is similar to building a family house . . . individual needs, desires, requirements, and finances vary.